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BUDGET FOLLOW-UP . . . *A few editorial comments*

From time to time an editor feels the need to "get a few things off his chest." Or, he would like to comment about authors and articles. He also finds that he must sometimes "set things right" if a mistake occurs in print. For these reasons, we are initiating in this issue a regular feature that, for lack of a better name, will be called Budget Follow-up. It would appear to be somewhat contradictory to locate at the front of the magazine a feature called Budget Follow-up, but because of the contents, it seems to belong at the beginning. In this matter of location your indulgence is humbly sought.

IN THIS ISSUE

This issue might well be subtitled "The Professors' Issue." The two major articles are authored by college professors and the comments on depressions were written by a retired professor.

The article entitled "Capital Budgeting" by Dr. Robert M. Soldofsky is principally oriented to the financial aspects of capital expenditures studies. The practical use you might make of the ideas contained therein will, no doubt, depend on the size of your company, the complexity of your capital budgeting problems and the extent of your own knowledge of financial mathematics. But to ignore concepts that you cannot immediately apply is to needlessly deny yourself the advantages of personal growth. The article is written in a clear, lucid style and is well worth your consideration.

Dr. Soldofsky is an able, dedicated, hard-working young man in his field of business finance. He is a firm believer in budgeting and continually strives to give his students an awareness of its importance to management. He has long been a good friend of the Tri-Cities Chapter of NSBB. He has spoken before that group and has also attended several regular monthly meetings with his students. On several occasions he has invited members of the Tri-Cities Chapter to attend his classes as guests.

Professor Ernest H. Weinwerm needs no introduction to members of NSBB. He is one of the co-editors of the NSBB textbook "Management Budgeting," now in final stages of completion. He is also a member of the National Research Committee and a very active and valuable member of the Chicago Chapter.

In his article in this issue entitled "The Difficult Art of Cost Reduction," Dr. Weinwerm displays a most appealing narrative style and a keen ability for getting to the heart of the problem. The title (of his own choosing) admits to the complexity of cost reduction problems but he never becomes pedantic in the presentation of his solution. One gets the feeling that he knows it will be easier to read his suggestions than to put them into effect.

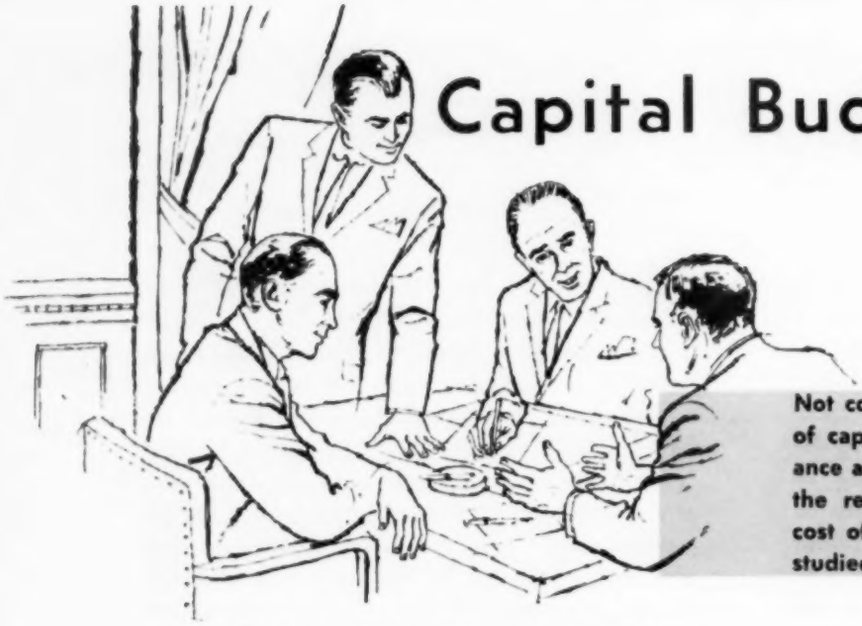
GRATIFYING OBSERVATIONS

The December 1960 issue of BUSINESS BUDGETING contained an article entitled, "Writing For The Business Press" by Pilson W. Kelly, reprinted from the MANAGEMENT REVIEW by permission of the American Management Association. In the introduction to this article, the hope was expressed that our members would be inspired to write dozens of articles for BUSINESS BUDGETING. That situation has not developed but it has been reassuring to see references to the article and the Editors' hopes in the Newsletters of several chapters. We are still hoping that some of our members will take Mr. Kelly's suggestion to heart and express themselves in writing for the benefit of BUSINESS BUDGETING.

VARIANCE

The article, "Education for Budgeting" by Clarence H. Jackman that appeared in the January 1961 issue came to the attention of the Editor by a somewhat indirect route. Because of this, certain credits were inadvertently left out. Mr. Jackman informs me that at the time he wrote the article he was teaching at Bradley University in Peoria, Illinois and that Bradley financed the necessary research. Particular encouragement and support was given to Mr. Jackman by Mr. Arthur Mehl, department head at Bradley. Credit is also due to the Peoria Chapter, of which Mr. Jackman was a charter member, for encouragement and assistance.

It is never our intention to deliberately exclude credit for material appearing in BUSINESS BUDGETING, and we are pleased to rectify the omission in the case of Mr. Jackman's article.



Capital Budgeting

By
Robert M. Soldofsky
Associate Professor of Finance
State University of Iowa

Not concerned with the administrative problems of capital budgeting, or the review of performance after approval, this article deals strictly with the relationship of the rate of return and the cost of money-capital. Capital considerations are studied in terms of financial mathematics.

One of the major problems facing business organizations — especially the large business organization — is the problem of developing its capital budget. The major questions are how much should be invested and which particular investment opportunities should be undertaken or developed.

The problem from the corporate manager's point of view is how to allocate the funds his organization has that can be used for new investment and additional funds that can be obtained for the purpose of expansion. The manager must have some basis or criteria for allocating the available or potentially available funds among a multitude of possible uses and for determining the quantity or amount of the expansion. What new products should be marketed? Should the production of a present product be expanded or contracted? If so, by what amount? Should a new plant be built? What size should it be? When should a machine be replaced? How much should be invested in inventory? All of these and other questions must be answered. But how?

This article is not intended to show how detailed cost studies and forecasts are prepared. Neither is it concerned with the administrative processes of discovering and assembling such projects for managerial consideration, their screening and approval (or denial), and finally the review of the performance of approved projects. It is only concerned with the formal criteria for capital budgeting and some of the more obvious limitations of this criteria. This formal criteria is simply that the rate of return from an investment should be equal to the cost of money-capital.

The cost of money-capital for the firm is the weighted average cost of all the long term funds being used by the business.[1] The discounted cash-flows method for determining the rate of return on an investment which will be described and compared with the payout method, is gaining increasing acceptance by very large businesses. Other well known methods not discussed here compute the rate of return on the original investment and the average return on investment.

Most businesses, including especially small businesses, use less sophisticated concepts of the cost of money-capital. For some business managers the cost of money-capital is simply the number of dollars paid out for the use of borrowed money. For other managers the cost may be the annual rate of dividends as related to book value of preferred stock and common stock may also be included in the concept of the cost of money-capital.

The payback, or payoff, criteria for estimating the return on capital is a simple cash-flows concept that roughly corresponds with cash-flow concept of the cost of money-capital. The payout method is by far the most widely used method for making decisions with respect to capital expenditures. This method will be described later and will be compared with the discounted cash-flows method.

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1. The computation of the weighted average cost of long term funds or money-capital has been described in the "Cost of Capital Function for a Firm," *Lectures in Business Finance,* 2nd edition, 1960 (Iowa Book and Supply Company, Iowa City, Iowa.)

Before going on to illustrate the use of the discounted cash-flows concept as it is used in capital budgeting, it is necessary to describe the procedure itself. Next the limitations on the usefulness of the method will be pointed out. Then the payback method will be described.

The Internal Rate of Return

First it must be kept in mind that capital goods have a value, not because of the costs imbedded in them or because of their cost of production, but because of their ability to provide a return to their owner over and above all costs excluding the costs of money-capital. Second, the value of the income earning property is the discounted value of the projected net income stream.

The discounted value of the income stream stated generally is the sum of the present worth of each year's anticipated income for the life of the assets. Alternatively, the rate of discount (internal rate of return, or marginal efficiency of an increment of capital) is the rate which equates the construction cost or purchase price (supply price) with the anticipated income stream. Given the total investment, the project may be undertaken, if the internal rate of return is equal to or greater than the cost of money-capital. These relationships are shown in Figure 1 in an idealized form. The internal rate of return curve, RR, may be thought of as the individual firm's demand for resources curve and the cost of capital curve, CC, may be thought of as the supply of money-capital curve from the firm's point of view.

Discounted Cash-Flows Method

The income from any piece of industrial plant or equipment has only a limited duration. It is convenient to compare the computation of the rate of return of a such limited lived property with perpetual income earning property. For example, take the case of 10 shares of $100 par, 5 per cent, preferred stock. If the market rate of return is 5 per cent the market price of the stock will be (approximately) $1,000 because the present value of an annuity of $50 per year is $1,000. This $50 may be called the *standard income* of a piece of perpetual income earning property. This standard income is the amount that the owner may receive while the capital remains intact or whole. If the *realized earnings* are more than $50 per year, the excess is a return for use of capital. This return or using up of capital may be called depreciation. Clearly if a part of the capital is used each year the total capital will be exhausted sooner or later. The capital has less than perpetual life; in other words capital as embodied in goods such as industrial equipment is used up or exhausted over a period of time.

Figure 1
Criteria For New Investment Decisions

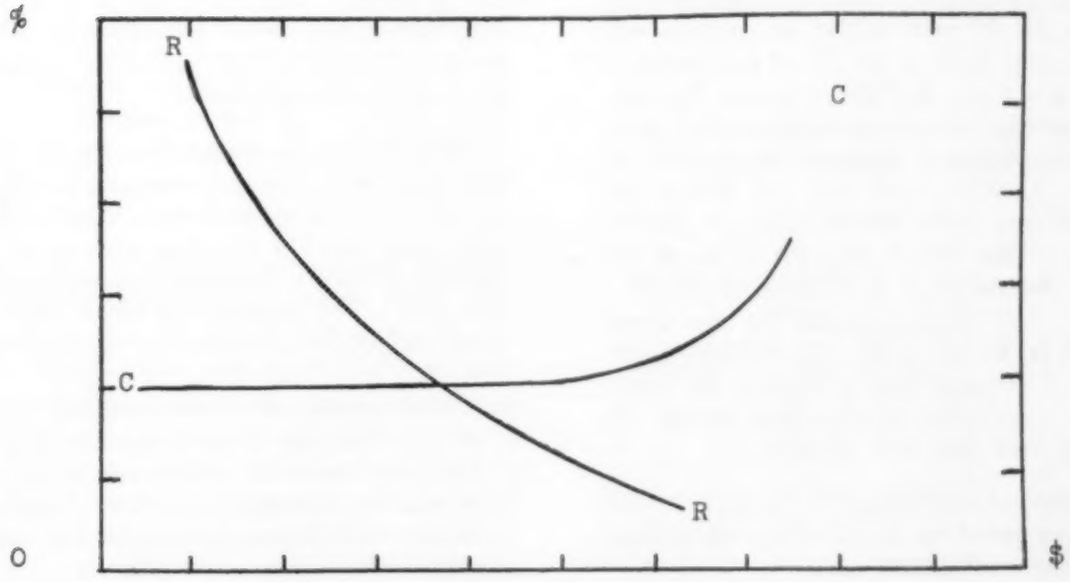

Table 1

Discounted Cash Flows Methods

End of Year	Present Value of Remaining Income	Standard Income At 5%	Uniform Realized Earnings That Will Exhaust $1,000 over 10 years	Difference Between Standard and Realized Income (Depreciation)
	(A)	(B)	(C)	(D)
Start	$1,000.00			
1	920.49	$50.00	$129.51	$ 79.51
2	837.01	46.03	129.51	83.48
3	749.35	41.85	129.51	87.66
4	647.31	37.47	129.51	92.04
5	560.67	32.87	129.51	96.64
6	459.19	28.03	129.51	101.48
7	352.64	22.96	129.51	106.55
8	240.76	17.63	129.51	111.88
9	123.29	12.04	129.51	117.47
10	(0.05)[a]	6.17	129.51	123.34
				$1,000.05[b]

a. The present value of an annuity of 1 per period is 7.7217 at 5 per cent for 10 years. Therefore, the present value of a 10 year annuity of $129.51 is $1,000 when the interest rate is 5 per cent.
b. The discrepency of 5 cents is due to rounding, epsecially the rounding of the uniform realized payment of $129.5051 to $129.51.

An amount of $1,000 may be invested to yield a very great variety of income streams. For example, $1,000 could be invested to yield realized earnings or incomes as follows:

$ 50.38 per year for 100 years
$ 54.78 per year for 50 years
$ 70.95 per year for 25 years
$129.51 per year for 10 years[2]

The difference between the standard income and the realized earnings in each case is depreciation for property with limited life.

Table 1 illustrates the "discounted cash flows" method. For example, if a new machine is purchased for $1,000 that is expected to earn $129.51 per year for 10 years and if the machine will have no scrap value at the end of that period, it is earning a 5 per cent rate of return. The standard income on a $1,000 investment is $50 (Cell 1-B). The difference between the realized income of $129.51 (Cell 1-C) and $50 is the depreciation of $79.51 (Cell 1-D). At the beginning of the second year the value of the machine has decreased to $920.49 ($1,000.00 - $79.51). The standard income for the second year will be $46.03 (Cell 2-B), $920.49, multiplied by 5 per cent. This is less than the $50.00 standard income for the first year because the principle itself has been reduced.

2. Computed by dividing 1 by the present value of 1 per period for the given number of years at 5 per cent interest rate.

The realized income is the same each year but because the standard income is reduced, the depreciation grows larger year by year. The sum of the annual amounts of depreciation is $1,000, which is the amount of the original investment. Each year's realized income includes both income as it is usually and a return of a part of the original investment.

When the rate of return is computed by the discounted cash flows method, the income after considering all expenses but before considering depreciation, is used.[3] This is necessary following the discounted cash flows method or depreciation will be counted twice; once when it is deducted from the earnings before computing the rate of return and again by the discounting process itself as has been demonstrated.

The rate of return computed by the discounted cash flows method may be compared with the cost of capital in arriving at an investment decision. Individual but very large corporations will probably find a few investment opportunities that will yield a very high rate of return. Some investments may be essential to the continuation of

3. The question of whether to deduct income taxes at this point or not is a troublesome one. The usual practice is to deduct it before completing the discounted cash flow. I prefer to include federal income taxes in the cost of capital calculations.

the enterprise and thus must be made. More investment opportunities will probably be found that will be able to achieve lower rates of return. The RR curve slopes downward and to the right. This is probably the general shape of the curve for large enterprises, but it must be given empirical content by each business.

Reasons for the Term: Discounted Cash Flows

The reason for the use of term "discounted" is clear; the discounting process is used. The use of the term "cash" should now be obvious. The income being discounted is the net income before depreciation, which is a non cash charge. The income being discounted in accounting or financial terms is the "cash throwoff" or internally generated cash. Certainly the accrual concepts of income and expense are used for every item other than depreciation.

Computing the Rate of Return by the Discounted Cash Flows Method

The preceding discussion was introduced in order to illustrate the detailed procedure underlying the discounted cash-flows method and to make clear the reason for using the realized earnings, that is the cash-flow, rather than the net earnings in the computations.

In any real case there will probably be an estimate of the initial outlay for a project and the probable realized earnings from the project. As long as the realized earnings are the same each year, it is a fairly simple procedure to determine the anticipated rate of return from the project. Assume that an investment of $1,000 will earn $140 per year for ten years and that the investment will have no scrap value at the end of that period. Then it may be asked, "What is the rate of return on an annuity of $140 per year when the present value of the annuity is $1,000." The formula, $a_{\overline{n}|} \frac{1-v^n}{i}$, must be solved for i. This may be done quickly with the aid of tables. The formula gives the value of an annuity of $1 per period. When n=10, the value for $a_{\overline{n}|}$ times $140 equals $1,000 at some rate of interest. The rate that equates the present value of the annuity and annuity payments is the interest rate sought. Computations may then be made for several values of i until the value sought is bracketed by rates of i that are almost exactly right. The correct rate of interest is then determined by interpolation. A short-cut method of finding the unknown rate of interest is to divide $1,000 by $140. The answer is 7.143. Then find values for n = 10 from a book of compound interest tables that bracket the value 7.143. Thus:

$a_{\overline{10}|}$	is ——	when	i = x
"	" 7.188	"	i = 6.5%
"	" 7.105	"	i = 6.25%
			0.25%

The rate of return sought is between 6.25 and 6.5 per cent. The approximate answer, 6.3 per cent is readily obtained by interpolation.

It should also be clear that if the present value of an annuity (the initial outlay for a project), its life expectancy, and the rate of interest are known, the amount of the annual annuity payments can readily be determined from Tables. In terms of the illustration that has been used, if the initial outlay (present value of the annuity) is $1,000, the expected life 10 years, and 5 per cent is an acceptable rate of return, the computed annual income after all costs except the cost of money would be $129.50. If the projected or expected income is above the amount, the project may be worthwhile; if the projected or expected income were less than that amount the project would not be worthwhile on the basis of strictly immediate economic and financial considerations.

It often happens that expected cash-flow is not a regular amount over the life of the project, but a fluctuating amount. Table 2 shows three possible cases in which the *pattern* of the projected cash-flows are different but total the same amount over their ten year expected life.

Table 2

Three Different Projected Income Streams With The Same Total Value

Year	Projected Income Stream A	B	C
1	95	185	$ 120
2	105	175	130
3	115	165	140
4	125	155	150
5	135	145	160
6	145	135	160
7	165	125	150
8	175	115	140
9	185	105	130
10	185	95	120
Total	**1,400**	**1,400**	**1,400**

Table 3

Calculation of Rate of Return on Property With Limited Life and Rising Earnings

(Purchase price of property, $1,000)

Year	Projected Income	6 Percent Discount Rate: Present Worth Factor	6 Percent Discount Rate: Present Worth of Projected Income	5 3/4 Percent Discount Rate: Present Worth Factor	5 3/4 Percent Discount Rate: Present Worth of Projected Income
1	$ 95	.5584	$ 89.62	.9456	$ 89.83
2	105	.8900	93.45	.8942	93.89
3	115	.8396	96.55	.8456	97.24
4	125	.7921	99.01	.7996	99.95
5	135	.7473	100.89	.7561	102.07
6	145	.7050	102.23	.7150	103.68
7	155	.6651	103.09	.6761	104.80
8	165	.6274	103.52	.6394	105.50
9	175	.5919	103.58	.6046	105.81
10	185	.5584	103.30	.5717	105.76
	$1400		**$995.24**		**$1008.53**

Interpolation

$$\frac{8.53}{13.29} = 64\% \qquad .64 \times .25\% = .1600\%$$

$$+ \quad \begin{matrix} 5.75\% \\ .16\% \\ 5.91\%, \text{ the rate of Return} \end{matrix}$$

In each case the rate of return is computed by the cash-flows method. The rates of return are: A, 5.91 percent; B, 7.54 percent; and C, 6.71 percent. The computation of the rate of return for these cases is more time consuming but conceptually just as simple as it was in the previous case of level, regular annual income. Table 3 illustrates the computation for Case A. The present value of each individual payment is discounted at the same rate. The present value of these individual calculations is summed and compared with the initial outlay. If the sum of the present values is greater than the initial outlay, the rate of interest used on the first try is too low. The process is repeated using a higher rate of interest. After three or four such sets of calculations interest rates which will provide a present value for the annuity very slightly above and below the initial outlay will be found. The range of interest rates may be 0.25 - 0.50 per cent. Once the correct interest rate is located as being within such a narrow range, the interest rate sought may be determined with sufficient accuracy by a simple interpolation.

The Capital Budgeting Technique Itself By the Rate of Return Process

The rate of return of an investment with limited life may be computed whether the expected cash-flows are regular and equal amounts, or fluctuating amounts. This rate of return, which is a true interest rate, may now be compared with the weighted average cost of money-capital, which is also a true interest rate. If the rate of return is greater than the cost of money-capital, the project may be worthwhile. If the rate of return is less than the cost of money-capital, the project is not feasible on strictly economic and financial considerations.

The capital budgeting process may also take an alternate form. An acceptable or cut-off rate of return may be determined by the firm. This rate may be used to discount the expected cash-flows for a given project. As before, if the present value of the cash-flows at the cut-off rate of interest is above the initial outlay, the project may be worthwhile; if less, it is not worthwhile.

In terms of Table 3, if the cut-off rate were 6 per cent or more, the project would not be worthwhile because the present value of the projected income stream is less than the purchase price, $1,000. If the cut-off rate of return were 5 3/4 per cent or less, the project would be worthwhile. Usually the margin between acceptability and non-acceptability will be larger than in the illustration which was prepared to demonstrate the method of calculation only. The rates of interest or discount are likely to be much higher than those used.

The cut-off rate of return is based upon the firm's past experience, capital structure strategy,

and expectations. This cut-off rate might be computed once a year and only be revised if the actual cost of money-capital varied from the cut-off rate by some predetermined number of percentage points.

Limitations of the Capital Budgeting Procedure

The statement of some of the major limitations of the capital budgeting procedure may be made rather briefly as compared with the necessarily lengthy exposition of the method itself. Nevertheless, an appreciation of the severe limitations upon the usefulness of the method is as important as an understanding of the mechanics of the method itself. On the rate of return side both the initial capital outlay and the realized earnings must be projected. Both of these projections involve formidable problems, some of which are overcome or "solved" only by brute strength. It is difficult enough to estimate the amount of the capital outlay without asking for the realized income pattern over the life of the project. Nothing in the capital budgeting procedure simplifies the problem of making the projections. An important advantage of the capital budgeting procedure is that it does require the firm to quantify its estimates carefully, including estimates of the timing of the receipts and outlays.

The capital budgeting technique, as it has been described, does not appear to be applicable to new research-based enterprise, or to the development of a research budget of a large organization. There apparently is no way of making reasonable advance estimates of the degree of economic success which will result from a research project. Some outlays may be required by law, such as devices to reduce or eliminate the pollution of water or air that result from waste products of a manufacturing process. The rate of return that results from improving working conditions may be impossible to measure. Other circumstances in which rate of return calculations cannot be made or should not be made can undoubtedly be suggested.

Capital budgeting as conceived thus far may only lie within the capabilities of very large business. Clearly no exact business size can be specified. Those individuals and businesses using capital budgeting must have an understanding and working knowledge of many basic points of economic theory, fiancial mathematics, economic forecasting, techniques for projecting the timing of receipts and expenditures, and administrative procedures. Small businesses are not likely to either have the personnel or the necessary experience. For example, after a large corporation has opened 100 retail stores, 500 gasoline stations, 50 branch banks, or uses thousands of vehicles and pieces of machinery and equipment, it is more likely to develop the experience on which to base a forecast.

Payoff Period

The payoff or payout period is simply the projected period of time that will be necessary to recover the initial capital outlay from the net income earned by a project plus the depreciation.

For example, from Table 2, the payout periods for projected income streams A and C are just over 6 years and for B the payout period is 7 years. If $450 of the projected income stream of $1,400 were received in the first year, $350 in the second year, and $200 in the third year, the payout period would be only three years. How can one select between projects A, B, and C? As long as the projects had equal anticipated lives and equal total recoveries, it should be clear that project A, in which the cash is recovered sooner, that the rate of return is highest.

Assume the projected income streams from three different projects are $50,000 per year and that the initial investment required is $250,000. Project D is expected to return $50,000 per year for 7 years, Project E for 10 years and Project F for 12 years, all three have the same payout period, 5 years, but it is obvious that Project F will have the highest rate of return.

The problem is not usually presented in such simple form. The payout period may be the same for three alternative projects as illustrated in Table 2, but the projected income patterns may be very different. The simple cash flows method is an inadequate technique for the selection of the more desirable project. Cash recovery rather than rate of return is stressed by the payout method. For the very small business which does not have access to the capital markets and always seems to be short of cash, selection on a payout basis of specific projects to be carried out with available funds may be a very advisable approach. The only condition would be that all competing projects are reasonably or adequately profitable. Whenever availability of cash is a major concern for business, the cash flows method of selecting among capital expenditures projects becomes of increasing importance.

Table 4

(Assume the original capital outlay is $10,000)[a]
Payout Period and Rate of Return

Number of Years of Cash Flow at Constant Amount Per Year	PAYOUT PERIOD 2 Yrs.	3 Yrs.	4 Yrs.	5 Yrs.	6 Yrs.
	ANNUAL CASH FLOW IMPLIED BY PAYOUT PERIODS[b]				
	$5,000	$3,333	$2,500	$2,000	$1,667
	RATE OF RETURN IMPLIED BY PAYOUT PERIOD (PERCENT)				
2	0				
3	23.4	0			
4	34.1	7.7	0		
5	41.1	15.2	7.9	0	
6	44.5	20.0	13.0	5.5	0
7	46.6	23.0	16.3	9.2	4.0
8	47.9	25.0	18.6	11.8	6.9
9	48.7	26.4	20.3	13.7	9.0
10	49.1	27.3	21.4	15.1	10.6

a. Assuming no scrap value at end of income earning life

b. The total cash flow over the life of the asset (project) is the annual cash flow multiplied by number years that this amount is earned as read in the left hand column.

The discounted cash-flows technique has at least three major advantages over the payout technique. It gives a true interest rate or rate of return; the rate on investment may be compared directly with the (rate of) cost of money-capital, and the rate of return is effected by the timing of receipts and expenditures. Both the discounted cash-flows and the payout method require projections of the initial outlay and the cash flow. One reaosn for using the payout period rather than the capital budgeting technique is that the projjections are likely to miss the mark by such a wide percentage that the more sophisticated techniques are not worthwhile. The risks are so great for any capital expenditure that may be adequately profitable that the earlier recovery of the original outlay is the deciding factor in authorizing outlays. Another reason for the popularity of the rule of thumb method is that it seems to work. The discounting method is not generally well understood.

Payout Periods in Use

In 1956 The Machinery and Allied Products Institute (MAPI) made a Survey of Equipment Replacement and Depreciation Policies and Practices. Sixty per cent of the respondents used a "Pay-Off Period Requirement" as the method of determining the need for equipment replacement for equipment with a service life of ten years or more. Table 5 shows that five years was the pay-off period most frequently used. However, 57 per cent of the companies using the pay-off method also stated the pay-off period itself varied with the company's liquidity position.

Thirty-four per cent of the firms stated that they used a rate of return method. There are at least four variants to the rate of return method: (1) rate of return on initial investment; (2) minimum-average cost method, (3) MAPI method; (4) and the discounted cash-flows method. About 1 per cent of the respondents reported they used the discounted cash-flows method.

Table 5

Pay-Off Period For Replacement Equipment With A Service Life of 10 Years Or More

Pay-Off Years (Years)	Percent of Firms Using Method
1	2
2	8
3	28
4	12
5	34
Over 5	16
	100

Source: Machinery and Applied Products Institute, A **Survey of Equipment Replacement and Depreciation Policies and Practices,** (Washington, D. C., 1956)

The payout period concept itself implies a rate of return. For example, if the payout period is two years, and no further income from the project is expected, there is no rate of return; the cash recovered is exactly equal to the original outlay.[4] If the project that paid out in two years

4. Equal annual cash flows are assumed for each year. The rate of return is obtained by solving the formula for the present value of an annuity of i when n=2. See previous text.

earned an amount in the third year equal to its annual receipts, it would be earning at a true rate of interest of 23.4 per cent. Table 4 gives some additional relationships between the pay-off period and the true rate of return.

Summary

This article has described the discounted cash-flows method of capital budgeting and the payout period method. These two methods, which represent the two extremes of simplicity and complexity of techniques, have been compared.

The discounted cash-flows method, despite its limitations and restricted area of usefulness, has the very great advantage of providing a true internal rate of return. The internal rate of return may be matched against time-adjusted cost of money-capital. These two concepts, the internal rate of return (which is a time-adjusted concept) and the time-adjusted cost of money-capital provide a basis for capital expenditure decisions by the individual firm that are consistent neo-classical economic analyses. Neo-classical economic analysis is very largely concerned with optimum resource allocation.

With the growing size of business units, advances in speed and ease of making long computations, and the importance of resource allocation within the firm for its own sake and that of the entire economy, capital budgeting techniques will come into wider use with the passage of time. ■

STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, JULY 2, 1946 AND JUNE 11, 1960 (74 STAT. 208) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF

BUSINESS BUDGETING (Insert exact title of publication) published Bi-Monthly (State exact frequency of issue)

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Editor	Neil F. Denen, Iowa-Illinois Gas & Electric	Co.,206 East Second, Davenport, Iowa
Managing editor		
Business manager	Melvin C. Aichholz, N.S.B.B.	6914 Miami Road, Cincinnati 27, Ohio

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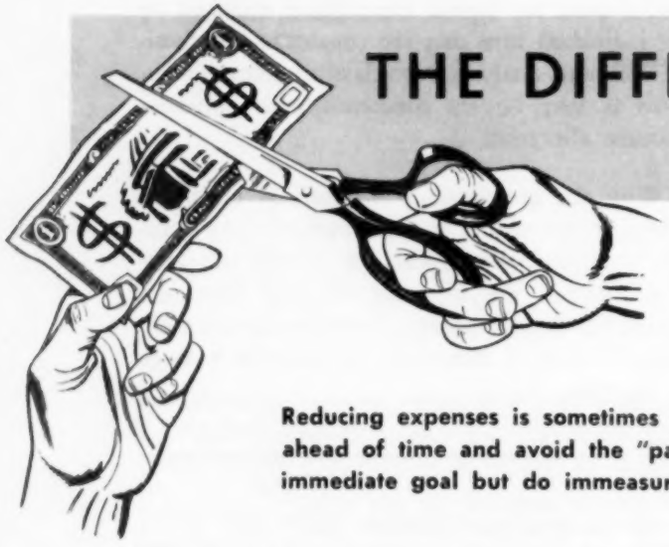
Melvin C. Aichholz
(Signature of editor, publisher, business manager, or owner)

Sworn to and subscribed before me this 20th day of January, 19 61

[SEAL] Margaret V. Hoffman

POD Form 3526 (July 1960)

(My commission expires May 31, 19 64)



THE DIFFICULT ART OF COST CUTTING

By
Ernest H. Weinwurm
DePaul University

Reducing expenses is sometimes necessary. You are here urged to plan for it ahead of time and avoid the "panic button" approach which may achieve the immediate goal but do immeasurable harm in future periods.

A Tale of Two Plant Controllers

The Wabash Manufacturing Company owns more than a dozen plants in several midwestern states. It is a major part supplier to the automotive and aircraft industries and, thus, substantially affected by the fluctuations of the production volume in these industries.

The company operates on a basis of decentralization; plant managers have considerable independence in conducting their affairs. Each plant has a controller who reports to the plant manager but is functionally under orders from the corporate controller.

The Wabash company uses a budget system which is under the supervision of the controllers at the home office and at the plants. Budgets are prepared at the plant level by the various department heads and coordinated by the controllers' departments at the plants and finally at headquarters. Following the dominating philosophy, the corporate controller is reluctant to make changes in the budgets submitted by the plants unless there is some overriding reason.

Plant controllers have not only charge of all accounting work including budgets, systems and data processing but are also responsible for office management and the numerous special services. As a result, they have overall supervision of a substantial number of people, particularly in the larger plants, and the budgets under their direct control represent a significant part of the plant budgets.

Mr. Smart was the controller of one of the major plants. He had extensive business experience, most of it with the Wabash company. He was a highly intelligent man with many different interests and was well regarded by his superiors. He always had new ideas on how to expand his activities and his work force. Moreover, he was usually successful in selling his proposals to the management and have them included in the budget. Thus his staff had been growing in recent years of good business. In his reports he described the work done by the departments under his supervision in glowing terms; they were accepted by the management as proof of their value to the company though, in fact, not too many of his recommendations were ever carried out as originally proposed.

Mr. Strict was the controller of another plant of the company. His concepts and operating procedures were quite different from those of Mr. Smart. He felt it to be his duty to accomplish his work with a minimum cost and personnel and no frills permitted. While the genial Mr. Smart always found a way to get promotions and raises for his people, Mr. Strict believed that accomplishment itself should be a sufficient reward and that the company could not afford higher costs. As a result, he was not particularly popular with his staff people. Many thought of him as just a petty dictator who was fond of pushing others around.

Following a number of highly successful years, the company was badly shaken by a substantial

decline in orders which occured quite unexpectedly. While the leaders of the automobile industry still continued to talk about big sales, they actually were cutting down on their schedules of production and purchase orders.

The Wabash Manufacturing Company was forced to close some plants and drastically cut the labor force in others. At the same time, the management ordered a 25% reduction of overhead expenses to be accomplished in sixty days.

When Mr. Smart and Mr. Strict received the order, their reactions were quite different. Mr. Smart had never been in doubt that the lush years would not last forever and he had laid out his plans accordingly. He knew that he could dispense with a good many activities he had started over the years and still have a work force which could take care of the essential tasks.

Mr. Strict, on the other hand, could see no way to reduce expenses by one fourth without wrecking his organization and falling behind with the work assigned to it. He spent many sleepless nights and talked with his assistants again and again in a frantic attempt to meet both the reduction and the deadline. But he got little help or co-operation from his disgruntled associates.

When management received the summary reports on the cost reduction drive, it was found that Mr. Smart had reduced his expenses by 35% and Mr. Strict had managed to cut them 10%. Savings accomplished by the other plants averaged between 15 and 20%. Top management made a careful review of the reports and, following lengthy discussions, all the members arrived at unanimous conclusions:

1. The drive had been generally successful and had fulfilled their expectations.

2. They were greatly disappointed by the inability of Mr. Strict to comply with their orders. This was particularly so in view of his excellent reputation in the past. But now it had become obvious that he lacked the guts and energy to live up to the emergency. Therefore, they decided to offer him the opportunity to retire immediately despite the fact that he had not reached retirement age and thus could receive only a reduced pension. Alternatively, he would have to face dismissal.

3. They were highly pleased by Mr. Smart's success in exceeding the prescribed goal. Their faith in his outstanding ability was greatly strengthened and they felt that he should be given the opportunity to use it on a broader scale for the benefit of the company. Therefore, they decided to offer him a position as "Headquarters Coordinator" of all the administrative activities so that the whole organization could have the benefit of his outstanding operating methods.

The Volume — Cost Dilemna

This may be a true story or it may be just fiction. But it undoubtedly reflects a situation which is far from unusual particularly at a time of recession. This opens up the important question as to how it might be conceivable that such odd effects could ever arise. An analysis of the underlying conditions should help in throwing some light on a very important managerial problem.

Businessmen consider it their primary duty to maintain the profitability of their companies as an essential prerequisite of survival and growth. They will take a serious view of every threat to profitability and they will make every effort to counteract it to the best of their ability. However, the question has been raised and needs investigation whether they always use the right methods to accomplish that desirable goal.

Profit is the difference between volume (revenue) and costs. Thus any decline in revenue must be followed by a related cost reduction to maintain the accepted profitability (rate of profit to sales and/or investment).

However, there is a major obstacle in the path of across-the-board cost reduction drives. This is the well recognized fact that costs do not necessarily fluctuate at the same rate as volume of production or sales. Some do but others don't.

There is no need to discuss here the fundamental distinctions between variable and fixed costs. But it may well be pointed out that business men have a tendency to underrate the impact of the fixed and semi-variable costs on the total cost picture. They would greatly prefer to deal with situations when all, or at least most, costs would be variable; for this would relieve them of one of their biggest headaches. Thus it is not surprising to find a preference for variable costs even in cases where the evidence points into the other direction. Needless to say that such

(Continued on page 16)

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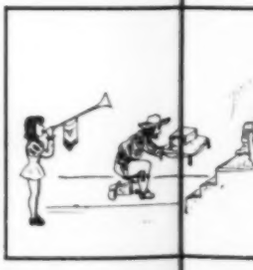

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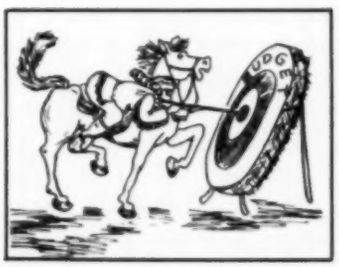

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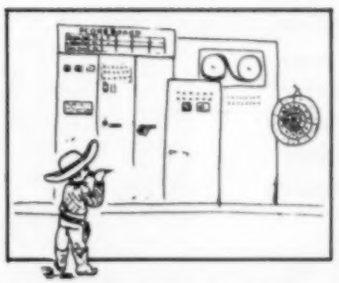


PLAY THE MANAGEMENT GAME

makes Jack a dull lad

OW

A TOUR OF OLD MEXICO

The Difficult Art of Cost Reduction

(Continued from page 13)

attitude is not only unfortunate but often outright misleading. For the present trend is toward an increase of the fixed costs and not the other way around. There are a number of causes for this development:

1. An ever increasing amount of equipment is required to support a worker particularly in the manufacturing industries. Additional and more expensive equipment, however, means higher fixed costs.

2. The trend toward automation represents a replacement of workers by machines. In other words, labor costs which are largely variable are supplanted by the use cost of the automatic equipment which is essentially fixed.

3. Both labor's claims for job security and the need for special skills to operate and maintain complex machines tend to turn a substantial portion of the labor cost into a fixed expense. Layoffs become more difficult in the face of restrictive agreements and often are unprofitable if difficulties of recruiting and costs of training or re-training are properly evaluated.

4. Costs of research and development, promotion and of many staff functions are virtually independent of volume fluctuations. These activities often involve a large investment in both labor and facilities which are practically lost once a decision is made to discontinue them. Additional substantial costs may be required to re-instate them at a later date when conditions have changed.

Thus modern business requires an ever increasing number of long-range decisions. Large amounts of money must be spent in advance of earning a profit which will exceed the original investment. Those long-range decisions cannot be reversed once they have been made except with the loss of the funds already invested and spent.

Short-run Versus Long-run Viewpoint

Business fluctuations are a part of our free enterprise system. We have had three recessions during the last fifteen years and we shall have to expect more of them in the future.

What should be management's position in dealing with these fluctuations? Shall it take the *short-run* view and swim with the crowd: expanding optimistically during the upswing virtually oblivious of a possible change but making a fast turn toward retrenchment with the first indications of a reversal of the cycle, trying to cut costs as if the downtrend should continue indefinitely.

It seems that many business men, perhaps a substantial majority, adhere to this kind of policy. They will insist that they are merely following a "common sense" approach in doing what appears to be correct at any particular time. They are confident of their ability to change policies whenever circumstances make it advisable.

But the difficulties of such a policy of reversal and restriction are easily underestimated. There is basic agreement that each case of retrenchment should be carefully evaluated before a cutback is ordered. Yet the time for such a study usually is not available. Managers and stockholders alike become nervous and even frantic when faced with a decline of sales and an even steeper reduction of profits. Everybody agrees that something decisive must be done to re-establish the sales to profit ratio; the decision is then made for an across-the-board (sometimes also called a "meat axe") cut regardless of the consequences.

Is this on-and-off or hot-and-cold policy really the best we can adopt? It is actually impossible to take a more considerate view and accept the fact, which few will deny, that we shall have those fluctuations every so often but neither the booms nor the busts will continue forever, so to speak. If such a point of view should be more widely accepted, its effects on individual enterprises and on the economy as a whole would be most significant.

As far as the individual company is concerned, it would result in a more steady policy over the whole cycle during both the expansion and the declining period.

Essential and Non-essential Activities

It is only natural that business men are optimistic during the upswing when profits are high and prospects are favorable and are more willing to expand facilities and activities. But even then they should not overlook completely the probability of a change. It should become accepted practice to remember the downtrend even during a period of expansion.

A practical approach to such a policy would be a classification of all existing and especially

of all newly authorized activities and projects with a view to their importance and indispensability during a downswing. This classification should be made at the time when activities are initiated and for those already existing at a time when there is no need for urgent decisions. It should be undertaken with care and with full consideration of all the factors involved.

Let's remember that the military services and many other government agencies are preparing plans in great detail for a variety of contingencies so that they can be put into operation with a minimum of delay whenever the need to do so arises. Why can't business executives follow the same principle and make plans in advance to deal in a reasonable manner with situations that are going to occur sooner or later? Then when the time comes to take action, a simple order, just like pushing a button, will get them started as a matter of course without any need for confusion or excitement.

Three major classifications of activities should be sufficient with as many subclassifications as may be required to meet particular situations. These will be as follows:

1. Indispensable
2. Necessary
3. Non-essential

The first group would not be subject to reduction except in cases when bankruptcy would be the only alternative. The third group, on the other hand, would be the prime target for retrenchment. It would include those projects and activities which could be delayed without any major disadvantage. However, care should be taken to salvage as much as possible of the work done (such as records, etc.) to make possible its eventual resumption with a minimum of additiontal expense. This group will probably have to be subdivided into numerous sub-groups of different type and value to the company.

Group two would usually not be considered in the early stages of a decline but only if a reduction of considerable length is anticipated. This group too would be subdivided into a number of smaller areas which would be treated differently in accordance with prevailing conditions.

Expected savings should be carefully evaluated in advance for each group and/or subgroup so that management would know exactly the amount involved and could make its decision accordingly. For instance, if a need developed to save $100,000 a month, the management would have the necessary information to determine that discontinuing of groups III/1 to III/3 would provide the required sum.

It should be pointed out that the proposed procedure refers to those activities which do not react easily to volume fluctuations. Direct operating costs which fluctuate closely with volume could be controlled in the traditional manner.

Obviously, it would be necessary to keep the classification schedules confidential in order not to affect the morale of those supervisors and employees who are working on lower grade projects. However, provision could be made in advance for transfer of particularly valuable employees to activities with a higher classification to prevent their routine separation from the company. This would prevent the discharge of specialists who may have been recruited and/or trained with great difficulty and at a high cost only to be dismissed at the time when they had reached a high grade of proficiency and usefulness to the company.

Need For a Long-range Viewpoint

Even if there is general agreement as to the advantages of a more constructive policy on discontinuing or slowing down of particular projects, the question remains what criteria management should use in making decisions regarding the amount and scope of necessary retrenchments during periods of declining volume.

Management certainly needs some sort of guidance or yardstick if the present method of expediency and off-the-cuff decision making shall be replaced by something more logical and consistent.

Present management policies are based on the premise of a responsibility for trying to maximize profits from year to year. According to this policy, each year stands by itself and has to be appraised individually. An examination of this implied assumption may be in order. It may be questioned whether the concept of the year as the basic period of accountability is as natural as is generally believed. After all, it goes back a long time when agriculture was the principal activity. Also it should not be forgotten that earlier business accounting was based on individual ventures which often would extend over several years. Therefore, the concept of the annual accounting

period is perhaps not as fundamental as it appears to be.

We also know that business activity is subject to fluctuations from time to time. As mentioned before, these fluctuations are a part of our free enterprise system. It follows that we must assume that sales, production and profits cannot be kept in a predetermined relationship all the time but that favorable years will be followed by poor ones more or less regularly.

Business men should keep these important and undeniable facts always in mind when they have to decide on the future of their enterprises. They should not focus all their attention upon one particular annual period but look at it as merely a part of a longer period. This is a point of view which deserves much more attention than it receives now.

Recent events provide a striking example how wrong conclusions are being drawn through an over-emphasis on short-term fluctuations. Corporate reports published during 1959 indicate large increases in profits in comparison with the 1958 figures. Conversely, these figures were substantially lower than those for 1957. Now it is a matter of record that 1958 was a poor year within the business cycle; therefore, the fluctuations are just what could be expected in the circumstances.

Comparisons from one year to the other tend to stress those short-term fluctuations which would largely disappear if the comparison basis would be, say, a five year average. Then neither increases or declines would be particularly large and the results of the last year would be shown against a much more significant background.

Business men should use a similar approach in making decisions on cutting activities and expenses. They should analyze carefully the causes and circumstances of a declining trend and make an attempt to distinguish between short-term declines which may be expected to reverse themselves within a limited period (as did the post-war recessions) and long-term declines when such a reversal may take much longer or may never occur. Obviously, different policies should apply to either situation.

A short-term decline should not encourage retrenchments which may hurt and/or retard future development and growth of an enterprise. It should be accepted as a temporary break in a long-term trend of profitability and growth.

In such case projects and activities which will promote future growth should not be discontinued. Perhaps, they may have to be slowed down whenever this can be done without permanent disadvantage. For example, the construction of buildings or delivery dates for equipment may be extended over a longer period when the recession indicates that the need for these facilities will not occure at the date anticipated originally.

On the other hand, an organization of people built up carefully over a lengthy period should not be disbanded suddenly without the most meticulous analysis of all the factors involved. Sometimes, it may be feasible to transfer some specialists temporarily to replace those who had to be discharged when volume declined. Thus they may be available again when the time comes to resume that activity. Similar action can be taken in many other cases to reduce costs without jeopardizing substantial investments through precipitate action.

However, when it appears that the industry or the company faces a lengthy or permanent decline, then steps must be taken to adjust the organization to the changing conditions. But even these reductions should not be made without a careful consideration of all related factors. The possibilities for a reversal of the unfavorable trend should be examined such as chances for broadening the existing line, a merger with some other growth company and so on. In every instance, advantages and disadvantages must be fully explored before a final decision is taken which becomes irreversible.

It was this concentration on short-term results that doomed Mr. Strict. If his accomplishments over a longer period would have been compared with those of Mr. Smart, management would probably have noticed the true situation namely that Mr. Strict contributed much more to the profits of the company than the more versatile Mr. Smart.

Many business men will agree with the recommendations suggested here at least in theory. But they will call for a formula which should permit them to recognize the position of their company with a view to prevailing and expected business cycle fluctuations. Unfortunately, there is no general formula which would cover every contingency. It is the responsibility of business management to ascertain its position in an ever changing economy and society. They must know where they stand, at least in broad terms, and

where they intend to go to. Otherwise, they will just stumble around in a dense fog.

The Finance Division

Special problems arise in attempting to adjust the expenses of the finance division to volume fluctuations. This division, like a number of others within the organization, lacks any rational correlation between its own work volume and the sales volume of the company. The work load may actually increase under such conditions with an increase in customers' orders and consequently an increase in records, postings, billings, etc. when customers decide to order smaller quantities more frequently to keep their inventory down. Also management may require more special studies to cope with difficult production and sales problems.

Nevertheless, the finance division cannot be excluded from contributing its share to a cost reduction program. Careful studies will have to be made to select activities which may be classified into group two and particularly into group three. Many useful activities will have to be curtailed by necessity: the number and frequency of reports may be reduced temporarily; simplified through less informative techniques will have to replace more significant but also more expensive ones.

New proposals will have to be given special attention. A short-run view must prevail and only those will be approved which promise substantial savings within a very short time. Others will have to be delayed temporarily even if considered very valuable.

The finance division should set an example to the other parts of the company in planning a program of cost reduction which will not affect the really vital services. If it is able to accomplish this goal, it will be accepted as adviser by other divisions when they struggle to do likewise.

Conclusion

Fortunately, we don't have to make a decision between the two extremes presented in our introductory case study. There is a middle road although it may not always be easy to find. But the advantages of substituting reason for emotions are obvious enough.

Management may well order a study of the lasting effects from earlier cost cutting efforts. The necessary data will usually be readily available. Many a business executive will be greatly surprised to find out how much the company lost when a carefully designed project had to be suddenly abandoned only to be reactivated a year or two later at a considerable additional cost. It will be seen that careful planning could have avoided a substantial part of that loss.

Recognition is increasing of the need for long-range planning as a corrolary of short-term decision making. Profitability and return on investment should also be evaluated from a longer-term point of view. The goal should be a satisfactory overall profit and return for a number of years which would include good as well as poor ones. Both managements and stockholders will have to be educated to look at fluctuations of the volume-cost-profit ratios from this broader point of view. Then they will no longer be frightened into precipitate decisions by a temporary decline in volume and profits but will accept it for what it really amounts to, namely, the effect of anticipated fluctuations from an average level.

Are You Behind the Eight Ball?

One enterprising budget man plugged up the holes and repainted a bowling ball as an "8" ball. This was presented monthly to the factory foreman with the greatest budget variance and displayed prominently on the offender's desk.

Reprinted from the Chicago Chapter Newsletter

The President's Message . . .

TO	FROM
The Members of the National Society for Business Budgeting	Mr. A. D. Moor United Air Lines International Airport San Francisco 28, California

SUBJECT MID-YEAR REPORT

DATE 2-17-61

The National Society for Business Budgeting has already progressed more than half way through another year and it seems appropriate that I report to you some of the events and developments which have taken place.

Visiting chapters and attending meetings of National officers and committees has been my principal activity during the last seven months. My major regret is that I cannot attend at least one meeting of each chapter. However, it is physically impossible to visit each of the 50 chapters we now have scattered throughout the country. I have had the good fortune to participate in four Charter Meetings; Utah and Baltimore in September, Richmond in October and Columbus in November. Vice President, Don Bacon, presented charters to the new Nashville Chapter in October and the newly Omaha Chapter in January. My participation in chapter meetings thus far has been limited to Kansas City, Louisville and Dallas, but I expect to visit Cincinnati in February and St. Louis in March. These chapter visits have enabled me to personally meet about 250 individual members of N.S.B.B. It has been an inspiration to see the chapter spirit that exists, to meet the officers who are successfully administering the Chapters' activities and to know the members who are capably handling the budget responsibility in their companies.

In addition to developing and implementing the programs for which they are responsible, the chairmen of the National Committees have participated extensively with the National officers in formulating the overall program of N.S.B.B. The chairmen of these committees met with the Executive and Planning Committees in Chicago in July and again in October to finalize their plans and to prepare recommendations concerning our total program for the Board of Directors.

In August and again in January, the National Officers and Members of our Executive Committee met in Chicago for the purpose of reviewing the current status of our programs at the National and Chapter level. These meetings have been instrumental in formulating plans which will help N.S.B.B. do a more effective job for its chapters and members.

You have already received invitations to attend the Annual Conference in Dallas. I recently had an opportunity to meet with Bill Campbell, Chairman of the 1961 Conference, and his committee for the purpose of reviewing the plans that had been made for the Conference in May. I can assure you that the program presented at this Conference will be one of substantial benefit to all those who attend.

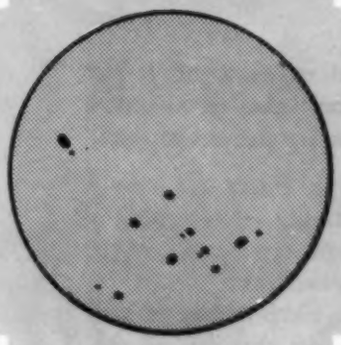
Future issues of Business Budgeting will present specific information concerning the Government Budget Committee, the Education Survey conducted by Don Bacon and the Textbook Committee. Additional reports in Business Budgeting will cover in a more general way other activities and planning now taking place.

In summary, at the Chapter and National level, N.S.B.B. is doing sound and constructive work in business communities throughout the country. Many expressions of appreciation have been received concerning the contribution N.S.B.B. is making in the field of Management. Each chapter and individual member has had a part in this effort and I want you to know it is being recognized and appreciated.

Sincerely,

Arthur D Moor

ART MOOR



SUN SPOTS: Do They Cause Depressions?

When the article entitled "Are We On The Threshold Of Another Depression?" by Thomas S. Dudick appeared in the June 1960 issue of BUSINESS BUDGETING we asked for comments from our readers. Professor Ernest H. Weinwurm of De Paul University, obliged and his remarks appeared in the December 1960 issue. Recently, another letter was received, this one from Willford I. King, Professor Emeritus, Economics, New York University. Because of its unusual nature we expect many further comments. Professor King's comments appear below.

THE ORIGIN OF CYCLES IN INDUSTRY

It is a matter of common knowledge that the volume of industrial output fluctuates widely. Are the ups and downs due to a multitude of causes which vary from time to time and thus make business forecasting virtually impossible; or are these oscillations largely rythmical in nature and hence predictable to a considerable degree? If so, what is the explanation?

Astronomers long ago learned that radiation from our sun is not constant, but is affected by variability in the number of sun spots. They also learned that the fraction of the sun's surface covered by spots moves in a cycle having a wave length of around 11.14 years.

Around 1937, Drs. Carlos Garcia Mata and Felix Shaffner made the astonishing discovery that the physical volume of production in manufacturing, mining, and transportation, tended to parallel to a marked degree the movements of this sunspot cycle. At about the same time, economists at the Harvard School of Business proved that another cyclical movement in business had a wave length of about 3.35 years. Following these remarkable discoveries, Simeon Hutner, in analyzing the data on production in the above-mentioned industries, covering a long period of years, found that if cycles having the two wave lengths just mentioned were subtracted from the total, there remained another cycle having a wave length of between 9.9 and 10.0 years. At almost the same time, Helm Clayton a student in meteorology, found that there was a sunspot cycle, having a wave length of 9.93 years. Some years later, Carlos Garcia Mata found that the 3.35 year cycle was present in radio waves — presumably of solar origin.

In the late 1930s, Simeon Hutner added these three waves together to form a composite. The waves are all strictly repetitive in nature, hence they and their composite can readily be extended into the future indefinitely. Thus extended, without any modification whatever, they have forecast approximately all of the major turns in industrial activity since 1940. Each of the last four turns has been hit, within a month or two, by the composite. The next upturn is forecast as starting at the end of 1961 and continuing mildly for a year.

It is practically certain that Old Sol will perform his part on time. Of course, other forces may intervene which will modify the course of industry, but we can count on the solar forces as always being influential.

WILLFORD I. KING
Economics-Professor Emeritus
New York University
28 Shore Road, Douglaston, N.Y.

The following additional comments were supplied by Professor King:

BUSINESS CYCLES

Business activity has many ups and downs. And the major swings are synchronous in all countries having free markets and well developed credit systems.

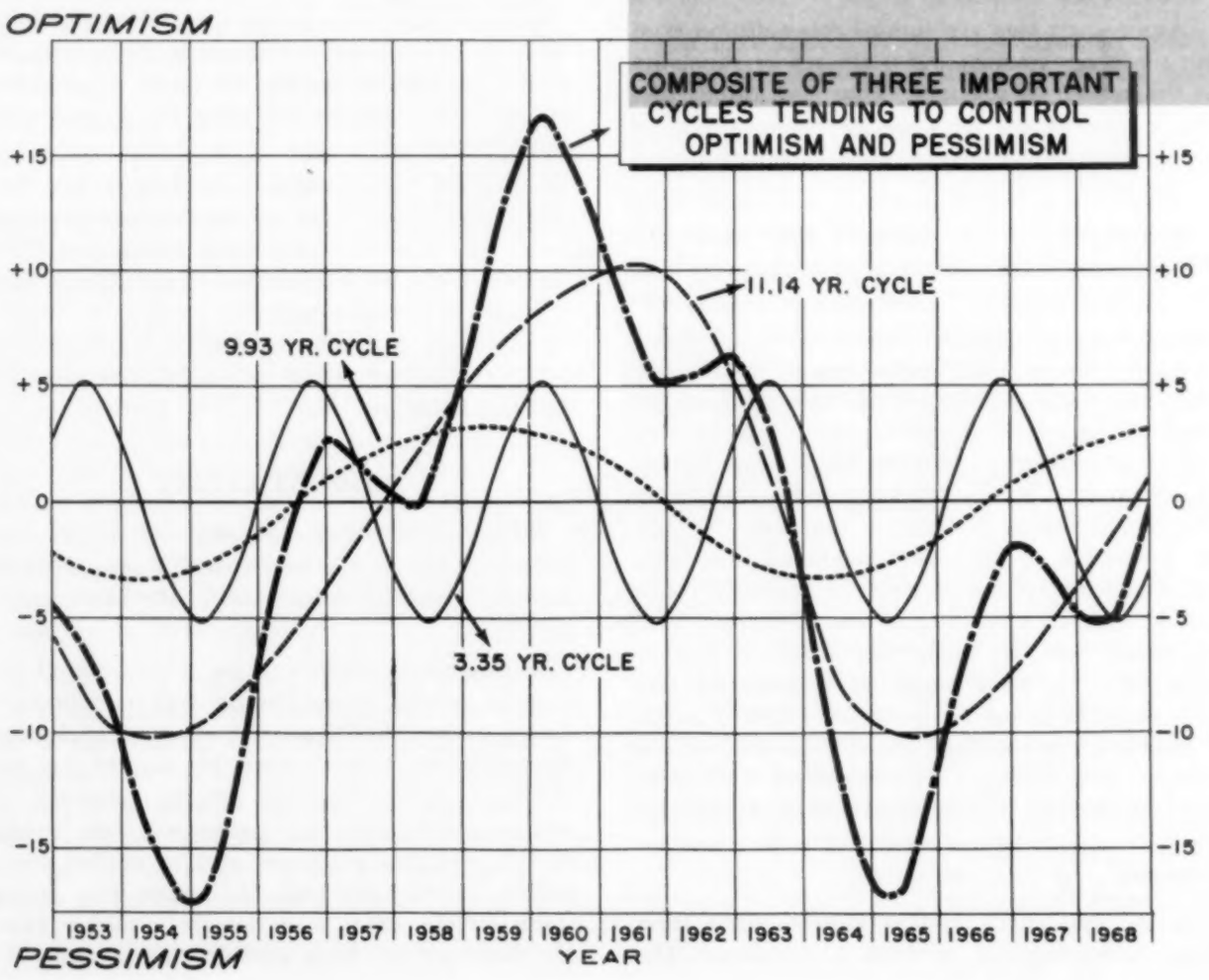
A painstaking analysis of the fluctuations of activity in mining, manufacturing, and transportation during the period 1850 to 1938 was made by Simeon Hutner for his Master's thesis. He showed that the oscillations were dominated by the composite of two sinusoidal curves having respective wave lengths of 3.35 and 9.93 years, and also by another curve having skewed waves each 11.14 years long. Minor forces having other wave lengths probably exist, but they have not been proved to be present.

Cycles having wave lengths identical with the three mentioned above are also found in natural phenomena — the 3.35 year wave length occurring in magnetic fluctuations, and the 9.93 and the 11.14 year wave lengths appearing in sunspot areas. This relationship is by no means surprising to anyone who realizes that, if the sun were to go out, all life and activity on earth would promptly disappear. But just why and how does solar activity affect business?

The answer seems to be that the human organism responds to the solar rays — some producing optimism and others pessimism. And these changes in sentiment affect business mainly because optimism causes people to borrow to buy, while, on the other hand, pessimism leads creditors to press for payment and borrowers to reduce their volumes of indebtedness. Such shifts in credit volume affect the *total* dollar demand for goods; and variations in total dollar demand are the *prime* forces responsible for business ups and downs. However, total demand is also affected by governmentally generated inflation or deflation of the currency, by price and wage rigidity, and by governmental or monopolistic interference with free competition. Labor-union action is an important example of the last-mentioned force.

Because powerful interfering forces are nearly always present, business activity but rarely conforms closely to the composite of the three major cycle waves described above. However, that composite practically always constitutes a force worthy of serious consideration, for it represents changing human sentiment. Therefore, it is a matter of interest to see how it has been behaving in recent years, and what will be its course in the future. So the three curves and their aggregate have been presented in the accompanying chart.

The part of the chart covering the years 1953 to 1960 was prepared in 1952. It is significant to observe that the composite curve forecast with surprising accuracy the dates of the bottoms of the 1954 and 1958 depressions and the tops of the 1956-7 and 1960 booms. Past experience therefore fully justifies the giving of very considerable weight to its indications concerning the probable future course of industrial and business activity.



NEWS *About Members* . . . .

ROSCOE HANKIN, this year's program chairman of the Milwaukee Chapter, recently spoke to the Milwaukee Chapter of the Society for Advancement of Management — Student Chapter. Reports from the officers of that organization indicate that Mr. Hankin's talk was very well received.

Members of the Dallas Chapter and their wives met on December 8 to discuss plans for the Annual Conference to be held in Dallas on May 25-26, of this year. This meeting stressed particularly the social activities that have been planned and the role the wives will play in making the convention a social success.

By the way, the mailing of Christmas cards to every member of NSBB by the Dallas members was a fine way to remind us all to make plans for the Conference in Dallas next May.

The Cleveland Chapter recently made its fifth consecutive annual contribution of $100.00 to the Building and Development Fund of the Cleveland Engineering and Scientific Society. Regular monthly meetings of the Cleveland Chapter are held in the CE&SS building.

BILL STRONG of the San Francisco-Peninsula Chapter headed up a session on "Communication-Making the Cost System Understood by Management" at an American Management Association seminar in Los Angeles, December 7-9. BILL also spoke to the Peninsula-San Jose Chapter of the National Association of Accountants in September on "Budgeting for Profits."

JOHN W. McNICHOLAS also of the San Francisco-Peninsula Chapter was one of the speakers at the National Association of Accountants Conference on Direct Costing held in San Francisco, February 9-11.

MAURICE S. MOYAL of the San Francisco-Peninsula Chapter was recently promoted to Statewide Fiscal Officer of the University Extension — University of California.

VERN RUTTER, President of the Chicago Chapter, has accepted the position of Controller, for Brunswick International C.A.

The Chicago Chapter is making preparations for the annual Spring Seminar on budgeting to be held on April 5 at the St. Clair Hotel. The Seminar is open to both members and non-members. TOM CONFORTI is Chairman.

WILLIAM J. EDMONDS, past President of NSBB and recently retired as Assistant Comptroller, Standard Oil Company (New Jersey) has accepted the position of Vice President and Director of Chace, Witeside & Winslow, Inc.

CHUCK HOLSTEEN, last year's President of the Chicago Chapter, recently spoke to a class in Air Transportation at Northwestern University on the subject of "Airline Revenues and Costs." He is also scheduled to speak to the Burlington, Iowa Rotary Club, the Cedar Rapids, Iowa Chapter of N.A.A. and at several Chicago area chapters of NSBB during the next few months.

Mr. R. W. Nopper, President of the Toledo Chapter, served as chairman of an American Management Association Workshop Seminar on February 8-10, 1961. The Seminar, entitled "Preparing the Operating Budget," was held in Dallas. Mr. Nopper is associated with Johns-Manville Fiber Glass Inc. in Toledo.

Evidence of the growing interest in operations

research among budget men is the announcement that Dr. Leonard W. Swanson, Manager in Charge of Operations Research in the Chicago Office of Arthur Andersen & Co., spoke at the January meeting of the St. Louis Chapter. Dr. Swanson's presentation was very well received by the 32 members and 14 guests present.

The January meeting of the Milwaukee Chapter was held in Racine and was a joint meeting with the Kenosha Chapter of the National Association of Accountants. The program was unique in that all members and guests presented a review of their company's 1960 operations and expectations for 1961.

Mr. Walter R. Bunge, past National President of NSBB, has accepted the position of Assistant Controller-Planning and Methods, at the Hughes Aircraft Company in Culver City, California. Mr. Bunge will have charge of the non-accounting areas of the controllership function including budgeting, long-range planning, interpretive reporting, electronic data processing and personnel development. For the past five years Mr. Bunge has been Manager of Budgets at Inland Steel Company in Chicago.

A group in Cedar Rapids, Iowa headed by Mr. M. R. Tyran of Collins Radio has been in the process of organizing a chapter of NSBB. They recently made an application for a charter, indicating that they had fourteen signed-up members with eleven additional prospects.

☆ ☆ ☆

Milwaukee Chapter Presents Budgeting Seminar at University of Wisconsin

The Milwaukee Chapter cooperated with the Management Institute of the University of Wisconsin in presenting a three day seminar entitled "Budget Techniques." The seminar was held on February 14, 15 and 16, 1961 in the Wisconsin Center Building, The University of Wisconsin Campus, Madison, Wisconsin. The brochure prepared by the University says in part:

> "In this workshop, MI presents an opportunity for three days' experience in new management techniques for material budgeting. Discussion will range from the techniques of budget construction to long-range planning.
>
> Leaders have been chosen on the basis of their own success in application and development of budget techniques and their ability to present the most effective methods for your consideration. Many of these speakers have participated in past workshops. This workshop has been developed and is being coordinated with the education committee of the Milwaukee Chapter of the National Society for Business Budgeting."

Among the Milwaukee Chapter members participating were JOHN M. GALVIN, KENNETH H. BENNETT, STANLEY B. GRADY, ROSCOE P. HANKIN, ROBERT L. KNETZGER, CARL A. KOLLER and EARL R. LENGER.

Titles of the various seminar sessions included:

- Fundamentals of Budgeting
- How to Control Manufacturing Expense Budgeting
- Sales Forecasting
- Budgeting for Selling, Administrative, and Research Expenses
- Budgeting the Profit and Loss Statement
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- Break-Even Analysis Return on Investment
- Budgeting for Capital Expenditures and Long Range Planning

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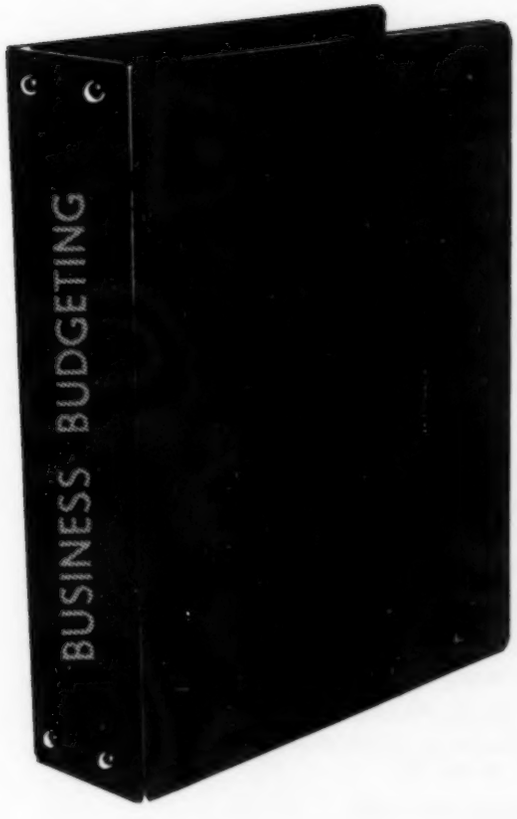

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